

Applicants : Thomas M. Jessell et al.
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amended claims marked up to show the changes relative to the previous version thereof is attached hereto as **Exhibit A**. In addition, please add new claims 41-48 as follows.

a1 -f17. (Amended) An isolated dorsalin-1 polypeptide comprising continuous amino acids, the sequence of which is set forth in SEQ ID NO:2.--

a2 -f19. (Amended) An isolated dorsalin-1 polypeptide comprising continuous amino acids, the sequence of which is set forth in SEQ ID NO:9.--

a2 --20. (Amended) A method for stimulating neural crest cell differentiation comprising contacting a neural crest cell with a composition, which composition comprises an amount of the isolated dorsalin-1 polypeptide of claim 17 or 19 effective to stimulate neural crest cell differentiation, so as to thereby stimulate neural crest cell differentiation.--

a3 -f22. (Amended) A method for regenerating nerve cells in a subject comprising administering to the subject a composition, which composition comprises an amount of the isolated dorsalin-1 polypeptide of claim 17 or 19 effective to regenerate nerve cells, so as to thereby regenerate nerve cells in the subject.--

a3 --23. (Amended) A method for promoting bone growth in a subject comprising administering to the subject a composition, which composition comprises an amount of the isolated dorsalin-1 polypeptide of claim 17 or 19 effective to promote bone growth, so as to thereby promote bone growth in the subject.--

--24. (Amended) A method for promoting wound healing in a

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subject comprising administering to the subject a composition, which composition comprises an amount of the isolated dorsalin-1 polypeptide of claim 17 or 19 effective to promote wound healing, so as to promote wound healing in the subject.--

--25. (Amended) A method for treating a neural tumor in a subject comprising administering to the subject a composition, which composition comprises an amount of the isolated dorsalin-1 polypeptide of claim 17 or 19 effective to inhibit tumor cell growth, so as to thereby treat the neural tumor in the subject.--

--26. (Amended) The method of claim 25, wherein the neural tumor is a neurofibroma.--

--27. (Amended) The method of claim 25, wherein the neural tumor is a Schwann cell tumor. --

--36. (Amended) An antibody capable of specifically binding to the isolated dorsalin-1 polypeptide of claim 17 or 19.

--37. (Amended) The antibody of claim 36, wherein the antibody is a monoclonal antibody.

--38. (Amended) The antibody of claim 36, wherein the antibody is capable of inhibiting the biological activity of dorsalin-1 polypeptide.--

--39. (Amended) A method for inhibiting the activity of dorsalin-1 polypeptide in a subject comprising administering to the subject an amount of the antibody of claim 38 effective to inhibit the the activity of dorsalin-1, so as to thereby inhibit the the acitivity

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of dorsalin-1 polypeptide.--

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--40. (Amended) A pharmaceutical composition for inhibiting the activity of dorsalin-1 polypeptide comprising an amount of the antibody of claim 38 effective to inhibit the activity of dorsalin-1 polypeptide and a pharmaceutically acceptable carrier.--

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--41. (New) A pharmaceutical composition comprising the isolated dorsalin-1 polypeptide of claim 17 or 19 and a pharmaceutically acceptable carrier.--

--42. (New) The pharmaceutical composition of claim 41, wherein the pharmaceutical composition comprises an amount of isolated dorsalin-1 polypeptide effective to stimulate neural crest cell differentiation.--

--43. (New) The pharmaceutical composition of claim 41, wherein the pharmaceutical composition comprises an amount of isolated dorsalin-1 polypeptide effective to regenerate a nerve cell in a subject.--

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--44. (New) The pharmaceutical composition of claim 41, wherein the pharmaceutical composition comprises an amount of isolated dorsalin-1 polypeptide effective to promote bone growth in a subject.--

--45. (New) The pharmaceutical composition of claim 41, wherein the pharmaceutical composition comprises an amount of isolated dorsalin-1 polypeptide effective to promote wound healing in a subject.--

--46. (New) The pharmaceutical composition of claim 41, wherein the pharmaceutical composition comprises an amount of isolated dorsalin-1 polypeptide effective to